



# The Arizona Tornado Outbreak of 2010

(Updated Oct, 2011)

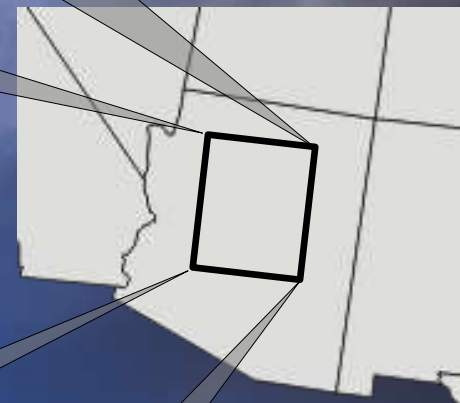
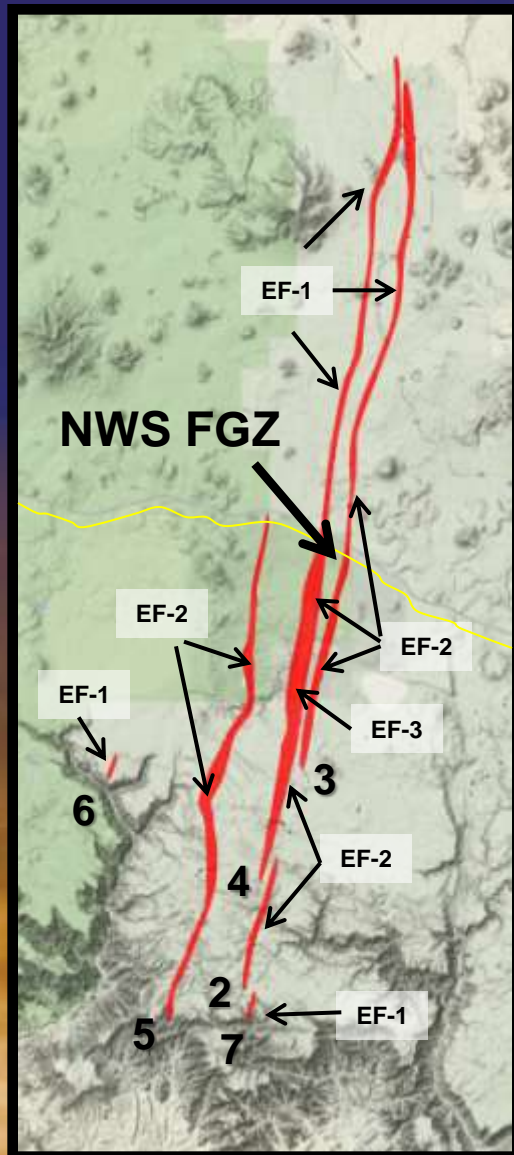
**NWS Flagstaff, AZ**



# The Updated Analysis

- Since our original analysis of the Oct 6<sup>th</sup> 2010 Tornado Outbreak, additional data have been examined to better determine the magnitude of the event.
  - *Additional ground surveys were conducted.*
  - *Radar data and storm rotational characteristics analyzed.*
  - *New Google Earth imagery utilized.*
  - *Additional research on damage ratings in forest areas.*
- From these additional analyses, it was determined that at least **11 tornadoes** touched down on Oct 6<sup>th</sup>, 2010 (the original estimate was 8 tornadoes). Tornado #4 was also upgraded to EF-3 intensity.

# Verified Tornadoes on Oct 6<sup>th</sup>, 2010



**Tornado #1** 2:05 AM EF-2  
**Tornado #2** 4:53 AM EF-2  
**Tornado #3** 5:18 AM EF-2  
**Tornado #4** 5:54 AM EF-3  
**Tornado #5** 6:50 AM EF-2  
**Tornado #6** 8:29 AM EF-1

**Tornado #7** 9:10 AM EF-1  
**Tornado #8** 10:30 AM EF-0  
**Tornado #9** 11:15 AM EF-3  
**Tornado #10** 12:10 PM EF-0  
**Tornado #11** 12:20 PM EF-0

(Tornadoes numbered near the start of each track on the maps)





# Warnings Issued on Oct 6, 2010

**28 Tornado Warnings**

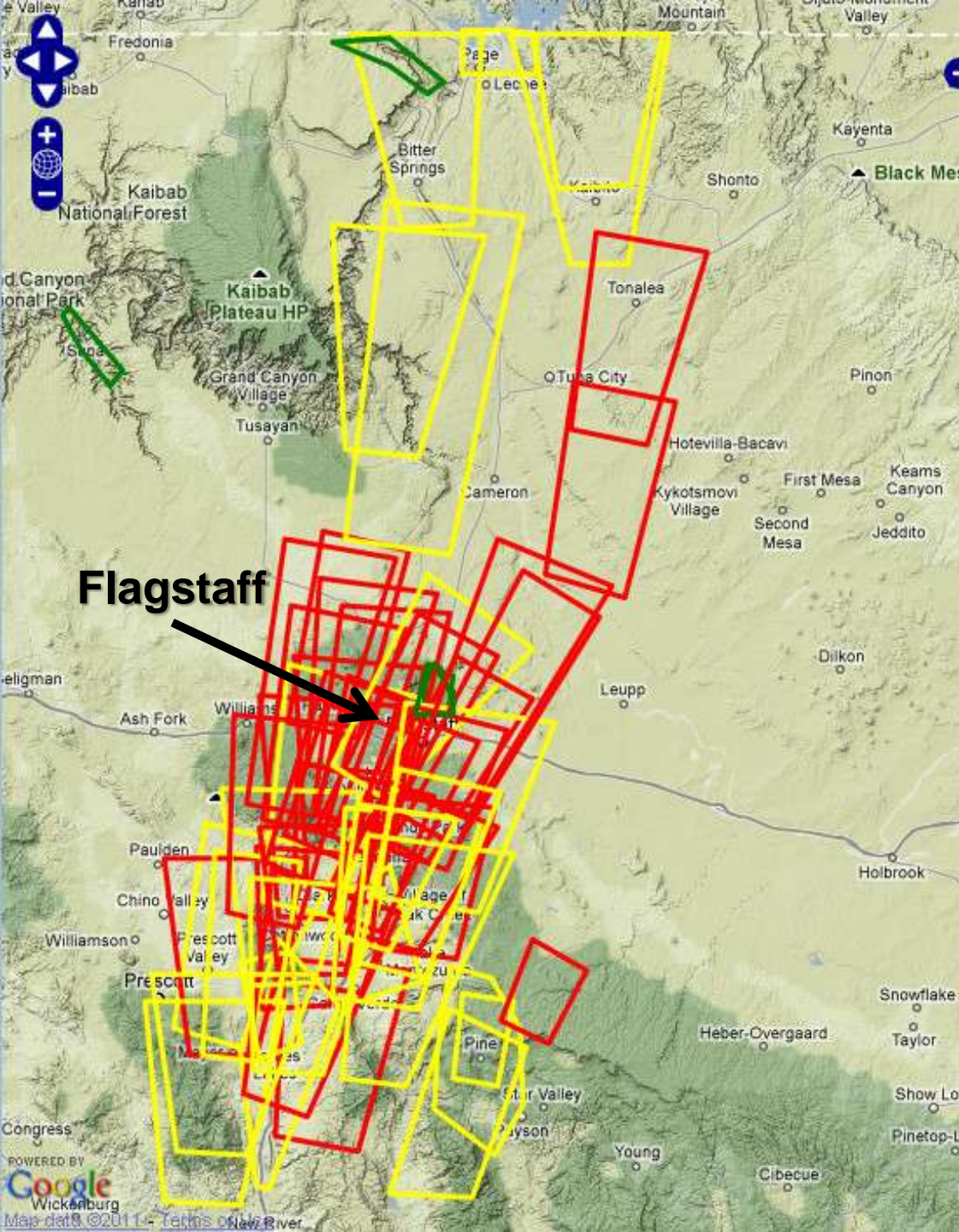
**25 Thunderstorm Warnings**

**2 Flash Flood Warnings**

**Flagstaff**



Each box represents the area indicated by a warning on Oct 6th. As you can see, there is a great concentration of warnings near Flagstaff. Potentially tornadic storms repeatedly moved over the same limited area of Northern Arizona throughout the morning.





# EF-1, EF-2 Damage in Bellemont



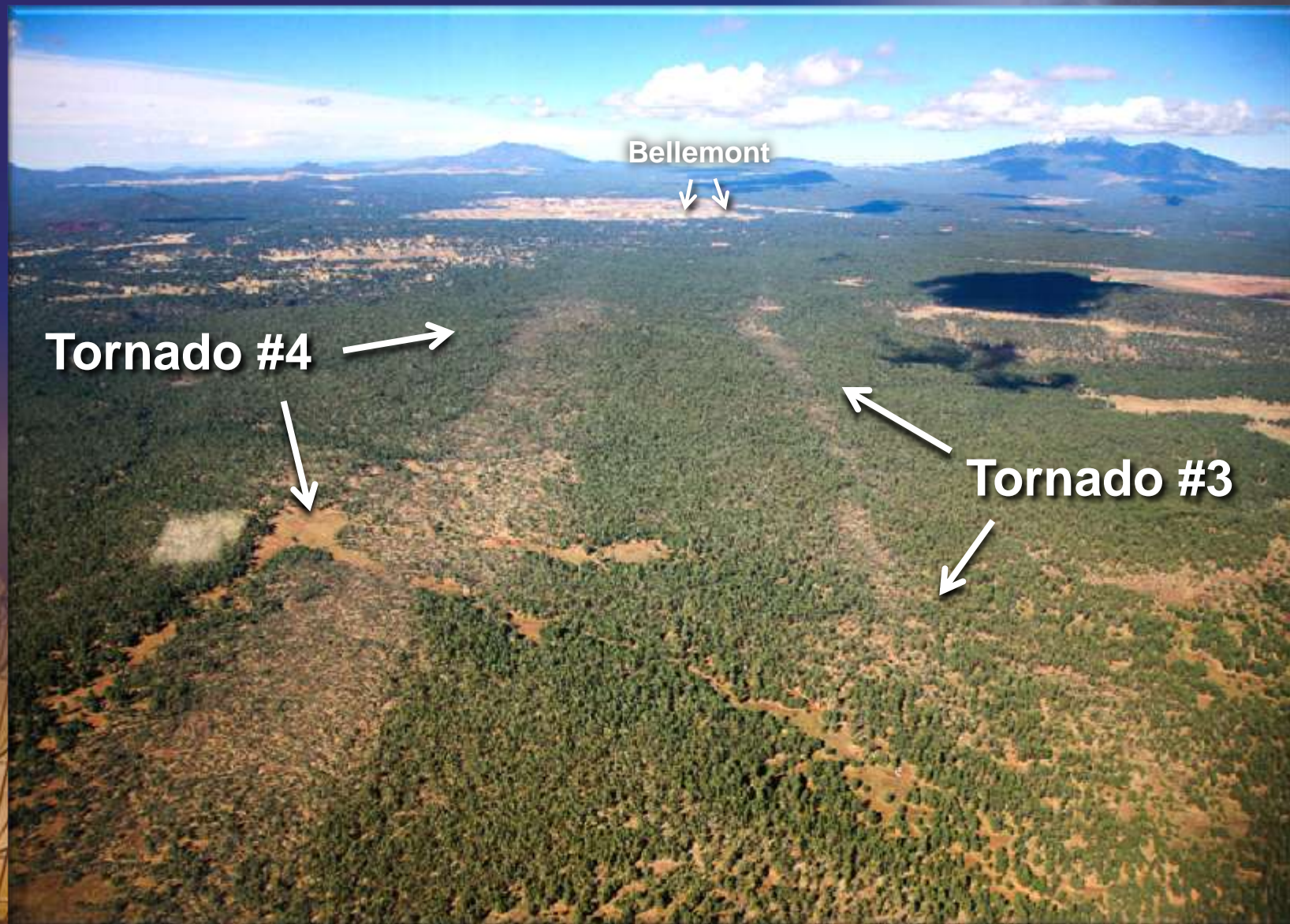


# EF-2 Forest Damage North of Bellemont



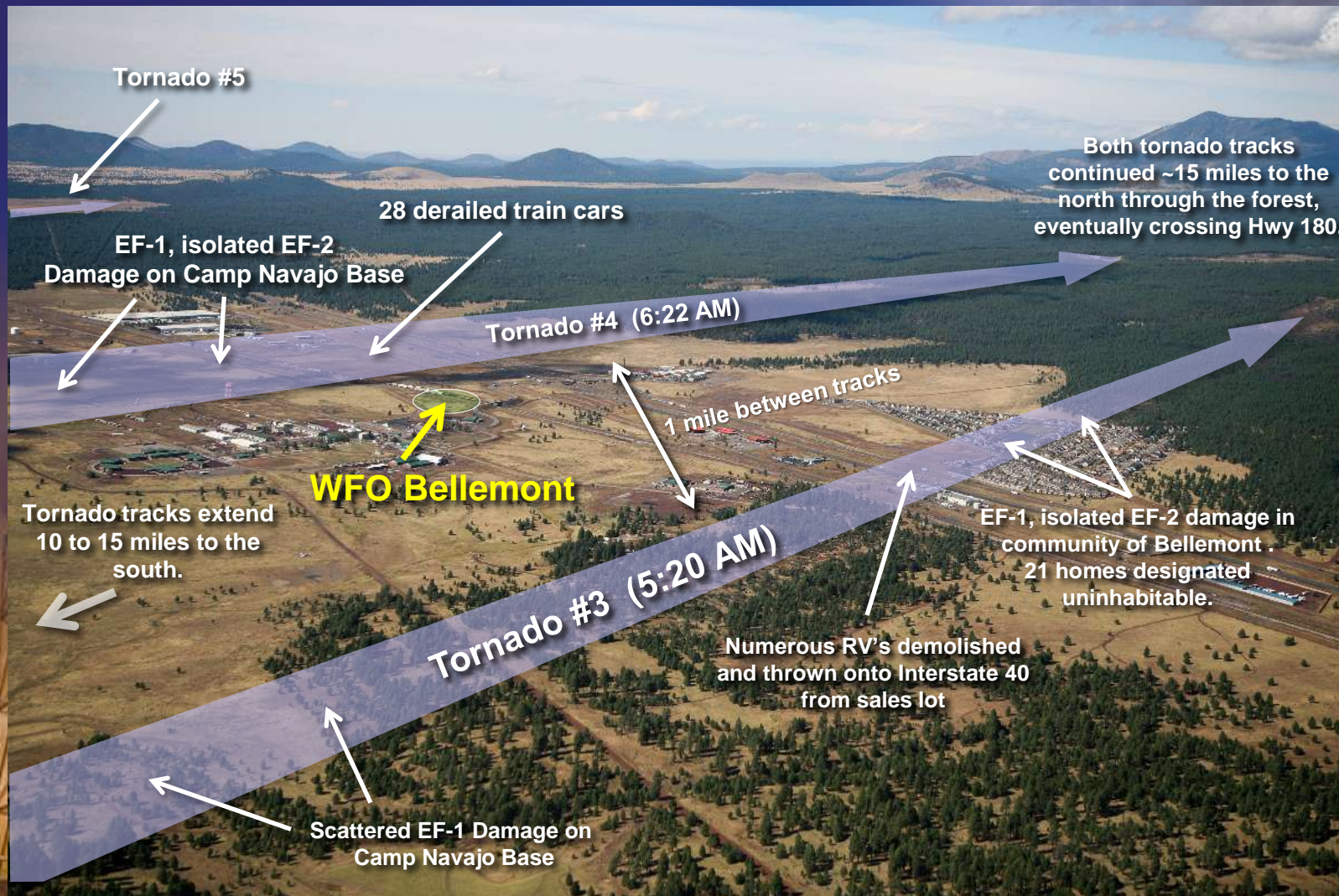


# Areal View ~10 Miles S. Bellemont





# Tornado Tracks / Damage Near Bellemont, AZ







# Summary of the Oct 6<sup>th</sup>, 2010 Tornado Event

- **Greatest outbreak in Arizona**
  - *(previous record was 6 tornadoes in one day)*
  - *Duration, intensity, and number of tornadoes distinguished this event apart from any other AZ event, or any other event west of the Continental Divide.*
  - *-At least 11 tornadoes recorded on this date. The number may go even higher with further investigation of current tracks.*
- **It was the greatest recorded tornado outbreak west of the Continental Divide.**
- **Large hail (up to baseball-sized) was reported with the tornadic storms.**
- **Multiple tornadic storms repeatedly developed over the same location, keeping the same small area under a constant tornado threat for several hours.**
- **Occurred late at night – early morning with temperatures in the 40s!**